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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/586,131 | 07/17/2006 | Masao Saito | 0033-1085PUS1 | 3838 |

2292 7590 03/15/2011
BIRCH STEWART KOLASCH & BIRCH
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| EXAMINER | |
|---|---|
| HICKS, CHARLES V | |
| ART UNIT | PAPER NUMBER |
| 2629 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 03/15/2011 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/586,131 | SAITO, MASAO | |
| | Examiner | Art Unit | |
| | CHARLES HICKS | 2629 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 December 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *12-23 and 25-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-23 and 25-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

This communication is responsive to amendments filed 12/28/2010. Claims 12,14, 23 and 28-30 have been amended. Claims 12-23 and 25-30 are currently pending.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-23, 25-26 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghercioiu et al. (US 2004/0010734) in view of Hasako et al. (US 2003/0093715), Keele et al. (US 2005/0086695), and Hickman et al. (US 7,100,069).

In reference to claim 12, Ghercioiu teaches a programmable display apparatus (Ghercioiu, pg. 1, par. 10),

that monitors and displays a state of a control target equipment comprising: storage means for storing symbol data for displaying a plurality of symbols related to each of a plurality of instructions executed by said control target equipment (Ghercioiu, pg. 14, par. 233);

display means for displaying an image (Ghercioiu, pg. 2, par. 12);

first display control means, based on the symbol data corresponding to the instructions executed by said control target test equipment for causing the symbols corresponding to said executed instructions to be displayed in a first display region in said display means (Ghercioiu, pg. 1, par. 7);

video signal input means for receiving an input of video data generated based on a picked-up image of said control target equipment for each of the instructions (Ghercioiu, Fig. 3, Video; pg. 7, par. 80);

video data storing means for storing said video data (Ghercioiu, Fig. 3, Video, Main Memory; pg. 7, par. 80);

determining means for determining abnormality of the control target equipment (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests the determining means for determining abnormality because the "certain detected events", "generated for display and analysis" in Ghercioiu are functionally equivalent to the claimed "determining means for determining abnormality" in the context of the claim),

detection means for detecting, upon determination of the abnormality by the determining means, designation of a symbol associated with a signal indicating the determined abnormality of the control target equipment among the plurality of symbols displayed in said first display region (Ghercioiu, pg. 7, par. 82; pg. 14-15, par. 240; pg. 15, par. 242),

Ghercioiu however fails to expressly teach a relation means for relating the symbol data corresponding to the instructions executed by said control target equipment to the video data stored in said video data storing means; and second display control means responsive to detection of said designation for causing a moving image to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu, comprising a relation means for relating the symbol data corresponding to the instructions executed by said control target equipment to the video data stored in said video data storing means (Hasako, Fig. 12, 13(a); pg. 1, par. 15-17; pg. 17, par. 376, 377);

and second display control means responsive to detection of said designation for causing a moving image to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region (Hasako, Fig. 12, 13(a); pg. 17, par. 376, 377).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu such that there is a relation means for relating the symbol data corresponding to the instructions executed by said control target equipment to the video data stored in said video data storing means; and second display control means responsive to detection of said designation for causing a moving image to be displayed in a second display region in said display

means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Ghercioiu as modified by Hasako however fails to expressly teach wherein the control means displays the moving image of at least one of a time period from a predetermined time previous to said detection and a time period to a predetermined time after said detection.

Keele discloses a display system comprising event detection, analogous in art with that of Ghercioiu as modified by Hasako, wherein the control means displays the moving image of at least one of a time period from a predetermined time previous to said detection and a time period to a predetermined time after said detection (Keele, pg. 10, par. 143).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the display apparatus of Ghercioiu as modified by Hasako wherein the control means displays the moving image of at least one of a time period from a predetermined time previous to said detection and a time period to a predetermined time after said detection, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to synchronize video display information with the appropriate screen data (Keele, Abstract).

Ghercioiu as modified by Hasako and Keele however fails to expressly teach wherein said programmable display apparatus monitors and displays the state of said control target apparatus without providing any program from the programmable display apparatus to said control target apparatus.

Hickman discloses a method and apparatus for controlling a target device over a network, analogous in art with that of Ghercioiu as modified by Hasako and Keele wherein a programmable display apparatus monitors and displays the state of a control target apparatus without providing any program from the programmable display apparatus to said control target apparatus (Hickman, Fig. 1; col. 8, ll. 30-41; Fig. 3, programmable display apparatus 26B monitors and can input to control target apparatus 26A without providing any program from the programmable display apparatus).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the programmable display apparatus of Ghercioiu as modified by Hasako and Keele to further comprise monitoring and displaying the state of a control target apparatus without providing any program from the programmable display apparatus to said control target apparatus, as taught by Hickman.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to permit the entire functionality of a target apparatus, remotely over a network (Hickman, Abstract).

Claim 13 is rejected as being dependent on rejected claim 12 as discussed above and further, Ghercioiu as modified by Keele and Hickman however fails to expressly teach further comprising: timer means for measuring a time, wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to the video data input through said video signal input means based on the time measured by said timer means.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu as modified by Keele and Hickman, further comprising timer means for measuring a time, wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to the video data input through said video signal input means based on the time measured by said timer means (Hasako, pg. 17, par. 397-399).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Keele and Hickman such that it further comprises timer means for measuring a time, wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to the video data input through said video signal input means based on the time measured by said timer means, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Claim 14 is rejected as being dependent on rejected claim 13 as discussed above and further, Ghercioiu as modified by Hasako, Keele and HIckman teaches further comprising: state signal input means for receiving an input of a state signal indicating the state of said control target equipment (Ghercioiu, pg. 14, par. 233);

log generation means for generating log information representing history of an operation of said control target equipment based on said time and said state signal (Ghercioiu, pg. 14, par. 233);

and log storing means for storing said log information (Ghercioiu, pg. 14, par. 233),

wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to said log information (Hasako, pg. 17, par. 397-399).

Claim 15 is rejected as being dependent on rejected claim 14 as discussed above and further, Ghercioiu as modified by Hasako, Keele and HIckman teaches wherein said state signal input means receives an input of said signal indicating an abnormality in said control target equipment (Ghercioiu, pg. 14, par. 233);

said log generation means generates log information indicating an abnormality in said control target equipment when said signal indicating an abnormality is input (Ghercioiu, pg. 14, par. 233);

said relation means relates a time at which said log information indicating an abnormality is generated to said log information indicating an abnormality for storage in said log storing means (Hasako, Fig. 13a; pg. 17, par. 376),

and said first display control means causes the symbols to be displayed in said first display region by making a difference between an output form of the symbol data for displaying the symbols corresponding to said log information indicating an abnormality and an output form of the symbol data for displaying the symbols corresponding to a normal state in said control target equipment, so that a first display manner in said display means of the symbols corresponding to said log information indicating an abnormality differs from a second display manner in said display means of the symbols corresponding to said normal state (Ghercioiu, pg. 14, par. 233).

Claim 16 is rejected as being dependent on rejected claim 15 as discussed above and further, Ghercioiu as modified by Hickman teaches wherein said detection means detects designation of the symbols displayed in said first display manner (Ghercioiu, pg. 14, par. 233).

Ghercioiu as modified by Hickman however fails to expressly teach said display apparatus further comprising: reading means for reading time corresponding to said log information indicating an abnormality from said log storing means based on detection of said designation.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu as modified by Hickman, further comprising: reading means for reading time corresponding

to said log information indicating an abnormality from said log storing means based on detection of said designation (Hasako, Fig. 13a; pg. 17, par. 376).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Hickman such that there is a reading means for reading time corresponding to said log information indicating an abnormality from said log storing means based on detection of said designation, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Ghercioiu as modified by Hickman and Hasako however fails to teach a reproduction means for reading video data corresponding to a predetermined period of time from said read time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means.

Keele discloses a display system, analogous in art with that of Ghercioiu as modified by Hickman and Hasako, with a reproduction means for reading video data corresponding to a predetermined period of time from said read time (Keele, pg. 10, par. 143),

wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means (Keele, Abstract; pg. 10, par. 143).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the display apparatus of Ghercioiu as modified by Hickman and Hasako such that there is a reproduction means for reading video data corresponding to a predetermined period of time from said read time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to synchronize video display information with the appropriate screen data (Keele, Abstract).

Claim 17 is rejected as being dependent on rejected claim 16 as discussed above and further, Ghercioiu as modified by Hickman and Keele however fails to teach wherein said display means displays said first display region and said second display region in the same screen.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu modified by Keele wherein said display means displays said first display region and said second display region in the same screen (Hasako, Fig. 13a.).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Keele wherein said display means displays said first display region and said second display region in the same screen, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Claim 18 is rejected as being dependent on rejected claim 15 as discussed above and further Ghercioiu as modified by Hickman and Hasako teaches wherein said detection means detects designation of the symbols displayed in said first display manner (Ghercioiu, pg. 14, par. 233),

said programmable display apparatus further comprising: reading means for reading time corresponding to said log information indicating an abnormality from said log storing means based on detection of said designation (Ghercioiu, pg. 14, par. 233).

Ghercioiu as modified by Hickman and Hasako however fails to teach a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means.

Keele discloses a display system, analogous in art with that of Ghercioiu as modified by Hickman and Hasako, such that there is a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time (Keele, pg. 10, par. 143),

wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means (Keele, Abstract; pg. 10, par. 143).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Hasako such that there is a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to synchronize video display information with the appropriate screen data (Keele, Abstract).

Claim 19 is rejected as being dependent on rejected claim 18 as discussed above and further, Ghercioiu as modified by Hickman and Keele however fails to teach wherein said display means displays said first display region and said second display region in the same screen.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu as modified by Hickman and Keele wherein said display means displays said first display region and said second display region in the same screen (Hasako, Fig. 13a.).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Keele wherein said display means displays said first display region and said second display region in the same screen, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Claim 20 is rejected as being dependent on rejected claim 15 as discussed above and further, Ghercioiu as modified by Hickman and Hasako teaches wherein said second display control means (Hasako, Fig. 13a; pg. 17, par. 376),

includes time data reading means for reading each time corresponding to each of said plurality of symbols from said log storing means (Ghercioiu, pg. 14, par. 233).

Ghercioiu as modified by Hickman and Hasako above does not expressly disclose video data reading means for reading video data corresponding to a predetermined period of time from said read each time for each of said plurality of symbols from said log storing means.

However, Hasako additionally teaches a display apparatus, analogous in art with that of Ghercioiu such that there is a reading means for reading video data corresponding to a predetermined period of time from said read each time for each of said plurality of symbols from said log storing means (Hasako, pg. 1, par. 15-17; pg. 17, par. 376).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to further modify the display apparatus of Ghercioiu as modified by Hickman and in view of Hasako as discussed above wherein there is a reading means for reading video data corresponding to a predetermined period of time from said read each time for each of said plurality of symbols from said log storing means, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Ghercioiu as modified by Hickman and Hasako does not expressly disclose a reproduction control means for causing a moving image to be displayed in said second display region in time order or backward in time from said time corresponding to any symbol of which said designation is detected based on said read video data.

Keele discloses a display system, analogous in art with that of Ghercioiu as modified by Hickman and Hasako, such that there is a reproduction control means for causing a moving image to be displayed in said second display region in time order or

backward in time from said time corresponding to any symbol of which said designation is detected based on said read video data (Keele, pg. 10, par. 143).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Hasako such that there is a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to synchronize video display information with the appropriate screen data (Keele, Abstract).

Claim 21 is rejected as being dependent on rejected claim 20 as discussed above and further, Ghercioiu as modified by Hickman and Keele and further in view of Hasako as discussed above does not expressly disclose wherein said display means displays said first display region and said second display region in the same screen.

However, Hasako additionally teaches a display apparatus, analogous in art with that of Ghercioiu as modified by Hickman and Keele wherein said display means displays said first display region and said second display region in the same screen (Hasako, Fig. 13a).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu in view of Hickman

and Keele wherein said display means displays said first display region and said second display region in the same screen, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Claim 22 is rejected as being dependent on rejected claim 12 as discussed above and further, Ghercioiu as modified by Hickman, Keele and Hasako teaches wherein said video signal input means receives an input of each video data generated based on an image of said control target equipment picked up by each of a plurality of image picking-up means (Ghercioiu, pg. 7, par. 80),

said relation means relates each symbol data corresponding to each of a plurality of instructions executed by said control means to said each video data and said second display control means causes each moving image to be displayed in said second display region based on said each video data (Hasako, pg. 1, par. 15-17; pg. 17, par. 376).

In reference to claim 23, Ghercioiu teaches a non-transitory computer-readable recording medium storing thereon a program causing a computer to function as a programmable display apparatus that monitors and displays a state of a control target equipment (Ghercioiu, pg. 14, par. 233),

said program causing said computer to execute the steps of: reading symbol data for displaying a plurality of symbols related to each of a plurality of instructions executed by said control target equipment from storage means for storing data (Ghercioiu, pg. 14, par. 233),

based on the symbol data corresponding to the instructions executed by said control target equipment (Ghercioiu, pg. 1, par. 7),

causing the symbols corresponding to said executed instructions to be displayed in a first display region in display means for displaying an image (Ghercioiu, pg. 1, par. 7);

receiving an input of video data generated based on a picked-up image of said control target equipment for each of the instructions (Ghercioiu, Fig. 3, Video; pg. 7, par. 80);

storing said video data in said storage means (Ghercioiu, Fig. 3, Video, Main Memory; pg. 7, par. 80);

determining abnormality of the control target equipment (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests determining abnormality because the "certain detected events", "generated for display and analysis" in Ghercioiu are functionally equivalent to the claimed "determining abnormality" in the context of the claim),

detecting, upon determining abnormality, designation of a symbol associated with a signal indicating the determined abnormality of the control target equipment among the plurality of symbols displayed in said first display means (Ghercioiu, pg. 7, par. 82; pg. 14-15, par. 240; pg. 15, par. 242).

Ghercioiu however fails to expressly teach relating the symbol data corresponding to said executed instructions to said video data; and in response to detection of said designation, causing moving images relating to the designated symbols to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the designated symbols displayed in said first display region.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu, relating the symbol data corresponding to said executed instructions to said video data (Hasako, pg. 1, par. 15-17; pg. 17, par. 376);

and in response to detection of said designation, causing moving images relating to the designated symbols to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region (Hasako, Fig. 13a; pg. 17, par. 376).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu such that there is a relation means for relating the symbol data corresponding to the instructions executed by said control means to the video data stored in said video data storing means; and second display control means responsive to detection of said designation for causing

moving images relating to the designated symbols to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process (Hasako, pg. 2, par. 30; pg. 3, par. 60).

Ghercioiu as modified by Hasako however fails to expressly teach wherein a display region displays the moving image during a period of at least one of prior to and after said detection.

Keele discloses a display system comprising event detection, analogous in art with that of Ghercioiu as modified by Hasako, wherein a display region displays the moving image during a period of at least one of prior to and after said detection (Keele, pg. 10, par. 143).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the display apparatus of Ghercioiu as modified by Hasako wherein a display region displays the moving image during a period of at least one of prior to and after said detection, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to synchronize video display information with the appropriate screen data (Keele, Abstract).

Ghercioiu as modified by Hasako and Keele however fails to expressly teach wherein said programmable display apparatus monitors and displays the state of said control target apparatus without providing any program from the programmable display apparatus to said control target apparatus.

Hickman discloses a method and apparatus for controlling a target device over a network, analogous in art with that of Ghercioiu as modified by Hasako and Keele wherein a programmable display apparatus monitors and displays the state of a control target apparatus without providing any program from the programmable display apparatus to said control target apparatus (Hickman, Fig. 1; col. 8, ll. 30-41; Fig. 3, programmable display apparatus 26B monitors and can input to control target apparatus 26A without providing any program from the programmable display apparatus).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the programmable display apparatus of Ghercioiu as modified by Hasako and Keele to further comprise monitoring and displaying the state of a control target apparatus without providing any program from the programmable display apparatus to said control target apparatus, as taught by Hickman.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to permit the entire functionality of a target apparatus, remotely over a network (Hickman, Abstract).

Claim 25 is rejected as being dependent on rejected claim 12 as discussed above and further, Ghercioiu as modified by Hasako, Keele and Hickman teaches wherein the second display means (Hasako, Fig. 12, 13(a); pg. 17, par. 376, 377),

is configured to start reproduction from an image associated with a symbol of the plurality of symbols (Hasako, Fig. 12, 13(a); pg. 1, par 15-17; pg. 17, par. 375-377; reproduction of video image B, started from image A),

said symbol being associated with an abnormality (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests the symbol being associated with an abnormality because the "certain detected events", "generated for display and analysis" in Ghercioiu are functionally equivalent to the claimed "symbol being associated with an abnormality" in the context of the claim).

Claim 26 is rejected as being dependent on rejected claim 25 as discussed above and further, Ghercioiu as modified by Hasako, Keele and Hickman teaches wherein the second display means (Hasako, Fig. 12, 13(a); pg. 17, par. 376,377),

displays an image at every predetermined period of time or a snap shot for each of the plurality of symbols (Keele, pg. 11, par. 149).

Claim 28 is rejected as being dependent on rejected claim 23 as discussed above and further, Ghercioiu as modified by Hasako, Keele and Hickman teaches

wherein said non-transitory computer readable program causes the computer to execute the step of starting reproduction from an image associated with a symbol of the plurality of symbols (Hasako, Fig. 12, 13(a); pg. 1, par 15-17; pg. 17, par. 375-377; reproduction of video image B, started from image A),

said symbol being associated with an abnormality (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests the symbol being associated with an abnormality because the "certain detected events", "generated for display and analysis" in Ghercioiu are functionally equivalent to the claimed "symbol being associated with an abnormality" in the context of the claim).

Claim 29 is rejected as being dependent on rejected claim 28 as discussed above and further, Ghercioiu as modified by Hasako, Keele and Hickman teaches wherein in said non-transitory computer-readable program, said step of starting reproduction includes the step of displaying an image at every predetermined period of time or a snap shot for each of the plurality of symbols (Keele, pg. 11, par. 149).

Claims 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghercioiu et al. (US 2004/0010734) in view of Hasako et al. (US 2003/0093715), Keele et al. (US 2005/0086695) and Hickman et al. (US 7,100,069), and further in view of Applicant's Admitted Prior Art (AAPA).

Claim 27 is rejected as being dependent on rejected claim 26 as discussed above and further, Ghercioiu as modified by Hasako, Keele and Hickman teaches a control program (Ghercioiu, pg. 14, par. 233),

includes the plurality of symbols (Ghercioiu, pg. 14, par. 233).

Ghercioiu, as modified by Hasako, Keele and Hickman however fails to teach wherein the control program is a ladder program.

Applicants admitted prior art teaches wherein the control program is a ladder program (current specification summary, pg. 1, par. 7).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the control program of Ghercioiu as modified by Hasako, Keele and Hickman, wherein the control program is a ladder program, as taught by Applicants Admitted Prior Art.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been so that programmable logic controller information can be recognized so that whether or not a logic circuit is established can easily be determined (current specification summary, pg. 1, par. 7).

Claim 30 is rejected as being dependent on rejected claim 29 as discussed above and further, Ghercioiu as modified by Hasako, Keele and Hickman teaches a control program (Ghercioiu, pg. 14, par. 233),

includes the plurality of symbols (Ghercioiu, pg. 14, par. 233).

Ghercioiu as modified by Hasako, Keele and Hickman however fails to teach wherein the control program is a ladder program.

Applicants admitted prior art teaches wherein the control program is a ladder program (current specification summary, pg. 1, par. 7).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the control program of Ghercioiu as modified by Hasako, Keele and Hickman, wherein the control program is a ladder program, as taught by Applicants Admitted Prior Art.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been so that programmable logic controller information can be recognized so that whether or not a logic circuit is established can easily be determined (current specification summary, pg. 1, par. 7).

### *Response to Arguments*

Applicant's arguments with respect to claims 12-23 and 25-30 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES HICKS whose telephone number is 571-270-7535. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629